

What Is Claimed Is:

1. An isolated protein or derivative, analogue, chemical equivalent or mimetic thereof wherein said protein is a novel sphingosine kinase protein.

2. An isolated protein according to claim 1 wherein said sphingosine kinase protein is a human sphingosine kinase protein.

3. An isolated protein comprising an amino acid sequence substantially as set forth in SEQ ID NO:2 or a derivative or mimetic thereof or a sequence having at least about 45% similarity to at least 10 contiguous amino acids in SEQ ID NO:2 or a derivative, analogue, chemical equivalent or mimetic of said protein.

4. An isolated protein according to claim 3 encoded by a nucleotide sequence substantially as set forth in SEQ ID NO:1 or a derivative or analogue thereof or capable of hybridising to SEQ ID NO:1 under low stringency conditions or a derivative, analogue, chemical equivalent or mimetic of said protein.

5. An isolated protein according to claim 1 substantially as set forth in SEQ ID NO:2.

6. Sphingosine kinase or *sphingosine kinase* or a derivative, analogue, chemical equivalent or mimetic thereof for use in modulating cellular functional activity.

7. A pharmaceutical composition comprising *sphingosine kinase*, sphingosine kinase or an agent capable of modulating *sphingosine kinase* or sphingosine kinase or derivative, homologue, analogue, chemical equivalent or mimetic thereof together with one or more pharmaceutically acceptable carriers and/or diluents.